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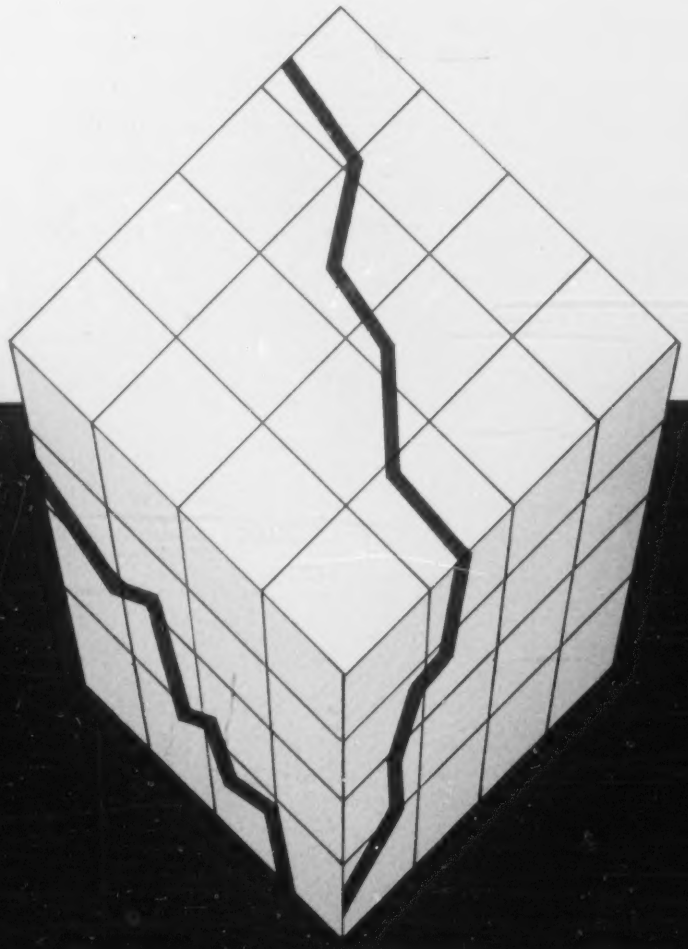

Sales of Natural Gas Liquids and Liquefied Refinery Gases

American Petroleum Institute

National LP-Gas Association

Gas Processors Association

1986 Sales of Natural Gas Liquids and Liquefied Refinery Gases

Finance, Accounting and
Statistics Department
October 1987

American
Petroleum
Institute

ORDER FROM:

Publications & Distribution
American Petroleum Institute
1220 L Street, Northwest
Washington, D.C. 20005

Printed in the United States of America

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Preface

The 1986 Sales of Natural Gas Liquids and Liquefied Refinery Gases marks the publication of the third survey jointly sponsored by the American Petroleum Institute (API), the Gas Processors Association (GPA), and the National LP-Gas Association (NLPGA). Two tables, covering the sales of ethane and pentanes plus (other than that used for motor gasoline blending) by PAD District and by consuming sector, are included for the first time.

Sales of natural gas liquids and liquefied refinery gases totalled 32.3 billion gallons in 1986. This volume reflected a decrease of 1.9 billion gallons or 5.5 percent from 1985. By product, ethane, propane and pentanes plus registered declines of 13.6, 5.8 and 10.6 percents respectively. Conversely, butane usage increased 9.3 percent.

According to the survey, industrial usage increased 6.5 percent and gas utility use was up 198.4 percent. Motor gasoline blending increased only 0.2 percent. All other sectors showed declines, with residential and commercial down 3.2 percent, chemical down 5.3 percent, farm down 4.2 percent, internal combustion fuel down 12.9 percent and other uses off 66.1 percent.

The following table illustrates the percentage distribution of total sales by sector in both 1986 and 1985.

Sector	1986 %	1985 %
Residental & Commercial	17.4	16.9
Internal Combustion Fuel	2.5	2.8
Chemical	34.6	34.5
Industrial	6.5	5.8
Gas Utility	1.9	0.6
Farm	5.1	5.0
Other	2.3	6.4
Gasoline Blending	29.7	28.0
Total	100.0	100.0

The ten states which had the largest volumes of sales are ranked below. Their sales came to 25.2 billion gallons or 78.1 percent of the total national volume.

Rank	State	Volume (M/gals)	% of Total
1.	Texas	12,638,497	39.1
2.	Louisiana	3,868,999	12.0
3.	Illinois	2,201,102	6.8
4.	Kansas	1,652,315	5.1
5.	California	1,335,879	4.1
6.	Michigan	911,664	2.8
7.	Ohio	791,622	2.5
8.	Florida	640,205	2.0
9.	Pennsylvania	609,784	1.9
10.	Iowa	589,213	1.8
	Total	25,239,280	78.1

Washington, D.C.
October 1987

TABLE 1. Sales of Natural Gas Liquids and Liquefied Refinery Gases in the United States, 1986 and 1985 (Thousands of Gallons)

Category	1986	1985	VOLUME CHANGE	% CHANGE
Product Type:				
Ethane 1/	7,627,158	8,832,768	-1,205,610	-13.6
Propane 2/	12,791,268	13,574,064	-782,796	-5.8
Butane 3/	7,398,762	6,766,284	632,478	9.3
Pentanes Plus 4/	4,490,178	5,020,470	-530,292	-10.6
United States Total	32,307,366	34,193,586	-1,886,220	-5.5
Principal Uses:				
Residential & Commercial	5,606,699	5,793,556	-186,857	-3.2
Internal-Combustion Fuel	820,504	942,254	-121,750	-12.9
Chemical/Industrial:				
Chemical 5/6/	11,179,406	11,801,620	-622,214	-5.3
Industrial 7/	2,108,003	1,979,137	128,866	6.5
Gas Utility	619,189	207,528	411,661	198.4
Farm	1,633,888	1,705,833	-71,945	-4.2
Other 8/	740,096	2,181,523	-1,441,427	-66.1
Gasoline Blending	9,599,581	9,582,135	17,446	0.2
United States Total	32,307,366	34,193,586	-1,886,220	-5.5

1/ Includes ethylene.
2/ Includes propylene.
3/ Includes isobutane and butylene.
4/ Includes isopentane, natural gasoline and plant condensate. Excludes field condensate.
5/ Includes use in synthetic rubber manufacture.
6/ The reported data strongly suggest that this category includes not only ethane, propane, butane and pentanes plus consumed as chemical feedstocks, but some refinery olefins and chemical plant fuel usage.
7/ Includes refinery fuel use.
8/ Includes use as synthetic natural gas feedstock and use in secondary recovery projects.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Table 2. Sales of Natural Gas Liquids and Liquefied Refinery Gases by Product Type, PAD District and State, 1986 and 1985 (Thousands of Gallons)

District & State	Ethane		Propane		Butane	
	1986	1985	1986	1985	1986	1985
PAD Dist. I						
New England						
Connecticut...	W	-	44,136	50,740	W	W
Maine.....	-	-	42,465	26,533	-	-
Massachusetts.	W	-	90,850	69,140	W	W
New Hampshire.	-	-	71,272	64,713	-	-
Rhode Island..	-	-	18,790	20,888	W	-
Vermont.....	-	-	37,026	33,848	-	-
Central Atlantic						
Delaware.....	-	-	33,084	41,825	W	W
Maryland/D.C..	W	-	58,788	75,170	W	W
New Jersey....	-	W	157,439	169,237	182,253	108,163
New York.....	-	-	208,271	207,715	W	W
Pennsylvania..	W	W	186,199	227,758	312,672	172,666
Lower Atlantic						
Florida.....	20,144	18,196	429,713	391,848	4,310	30,099
Georgia.....	-	-	272,221	290,040	W	W
North Carolina	-	-	309,587	321,303	W	W
South Carolina	-	-	122,678	133,987	W	750
Virginia.....	-	-	141,783	162,143	W	W
West Virginia.	-	-	38,196	35,153	W	W
Total.....	117,600	60,480	2,262,498	2,322,041	536,913	325,206
PAD Dist. II						
Illinois.....	629,113	550,683	721,452	746,987	679,054	706,779
Indiana.....	W	-	329,128	328,373	97,390	37,097
Iowa.....	W	W	586,005	589,111	W	W
Kansas.....	437,118	297,226	180,480	528,816	483,638	584,110
Kentucky.....	W	W	251,123	268,319	118,286	97,903
Michigan.....	W	W	695,252	603,272	169,170	161,784
Minnesota.....	-	-	395,714	354,822	W	W
Missouri.....	-	-	383,653	372,438	W	8,007
Nebraska.....	-	-	163,225	176,725	534	W
North Dakota..	-	-	89,402	26,811	56,741	47,922
Ohio.....	W	W	518,888	601,174	61,574	105,736
Oklahoma.....	2,280	20,415	205,670	314,676	217,804	249,621
South Dakota..	-	-	104,189	85,678	-	W
Tennessee.....	-	-	165,330	149,060	W	W
Wisconsin.....	-	-	346,655	361,236	W	W
Total.....	1,326,464	1,701,630	5,136,166	5,507,498	1,910,286	2,032,152
PAD Dist. III						
Alabama.....	W	-	174,913	174,075	501	313
Arkansas.....	-	-	167,212	176,204	5,535	2,597
Louisiana.....	1,129,731	1,677,244	519,155	504,719	1,750,134	1,528,515
Mississippi...	-	-	146,667	199,834	25,033	21,328
New Mexico....	-	-	70,668	139,646	22,725	26,736
Texas.....	4,987,792	5,340,069	3,078,102	3,277,514	2,472,176	2,022,441
Total.....	6,117,574	7,017,313	4,156,717	4,471,992	4,276,104	3,601,930
PAD Dist. IV						
Colorado.....	-	W	89,477	103,723	8,302	11,290
Idaho.....	-	-	30,718	36,230	-	-
Montana.....	-	-	63,384	61,597	W	W
Utah.....	-	-	37,892	57,144	78,249	55,803
Wyoming.....	W	W	55,578	65,340	107,973	93,627
Total.....	1,132	1,687	277,049	324,034	196,644	244,751
PAD Dist. V						
Alaska.....	-	-	W	W	-	-
Arizona.....	-	-	82,183	76,034	9,711	W
California....	W	W	653,953	651,609	356,327	372,742
Hawaii.....	-	-	W	W	-	-
Nevada.....	-	-	45,894	47,386	W	W
Oregon.....	-	-	71,660	67,345	W	W
Washington....	-	-	85,136	84,940	112,405	173,475
Total.....	64,388	51,658	958,838	948,499	478,815	562,245
U.S. Total.....	7,627,158	8,832,768	12,791,268	13,574,064	7,398,762	6,766,284

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

TABLE 2

Pentanes Plus 1986	Pentanes Plus 1985	Total 1986	Total 1985	District & State
				PAD Dist. I
				New England
W	-	46,933	51,680	...Connecticut
-	-	42,465	26,533	.....Maine
W	W	96,788	74,147	.Massachusetts
-	-	71,272	64,713	.New Hampshire
-	-	24,500	20,888	..Rhode Island
-	-	37,026	33,848	.....Vermont
				Central Atlantic
-	W	50,956	59,967	.....Delaware
-	W	60,335	76,263	.Maryland/D.C.
W	93,158	356,699	370,743	....New Jersey
W	W	209,498	209,428	.....New York
W	W	609,784	455,368	..Pennsylvania
				Lower Atlantic
W	156,015	640,205	596,158	.....Florida
W	W	282,443	312,304	.....Georgia
W	-	314,921	323,396	North Carolina
W	W	124,516	135,416	South Carolina
W	-	142,242	162,529	.....Virginia
W	W	39,948	35,994	.West Virginia
233,520	301,648	3,150,531	3,009,375	.....Total
				PAD Dist. II
171,483	20,426	2,201,102	2,024,875	.....Illinois
W	92,442	571,243	457,912	.....Indiana
W	W	589,213	594,463	.....Iowa
551,079	618,280	1,652,315	2,028,432	.....Kansas
23,936	21,752	419,595	430,181	.....Kentucky
46,975	33,759	911,664	826,777	.....Michigan
W	W	417,177	461,522	.....Minnesota
W	W	384,611	381,357	.....Missouri
539	W	164,298	177,757	.....Nebraska
11,866	59,360	158,009	134,093	..North Dakota
W	W	791,622	1,471,624	.....Ohio
76,817	113,238	502,571	697,950	.....Oklahoma
-	-	104,189	86,254	..South Dakota
W	W	167,142	150,698	.....Tennessee
W	W	347,047	362,304	.....Wisconsin
1,008,882	1,044,919	9,381,798	10,286,199	.....Total
				PAD Dist. III
1,076	W	176,541	176,856	.....Alabama
W	727	173,067	179,528	.....Arkansas
469,979	418,237	3,868,999	4,128,715	.....Louisiana
W	W	171,889	222,394	...Mississippi
51,539	188,857	144,932	355,239	....New Mexico
2,100,427	2,448,698	12,638,497	13,088,722	.....Texas
2,623,530	3,060,219	17,173,925	18,151,454	.....Total
				PAD Dist. IV
24,380	38,944	122,159	154,720	.....Colorado
-	-	30,718	36,230	.....Idaho
W	57,280	79,522	202,908	.....Montana
212,822	99,882	328,963	212,829	.....Utah
111,366	187,646	276,049	347,537	.....Wyoming
362,586	383,752	837,411	954,224	.....Total
				PAD Dist. V
-	W	13,300	15,009	.....Alaska
W	W	92,270	92,632	.....Arizona
261,211	228,875	1,335,879	1,304,884	....California
-	-	6,712	6,296	.....Hawaii
-	-	46,030	47,432	.....Nevada
W	-	71,969	67,666	.....Oregon
-	-	197,541	258,415	....Washington
261,660	229,932	1,763,701	1,792,334	.....Total
4,490,178	5,020,470	32,307,366	34,193,586	.....U.S. Total

Table 3. Sales of Natural Gas Liquids and Liquefied Refinery Gases, by End Use, PAD District and State, 1986 and 1985 (Thousands of Gallons)

District & State	Residential & Commercial 1986	Residential & Commercial 1985	Internal Combustion Fuel 1986	Internal Combustion Fuel 1985	Chemical 1/ 1986	Chemical 1/ 1985	Industrial 2/ 1986	Industrial 2/ 1985
PAD Dist. I								
New England								
Connecticut	28,803	32,515	1,995	2,990	W	W	11,640	12,769
Maine	26,126	17,734	2,064	1,445	W	W	10,479	5,347
Massachusetts	58,262	51,918	5,574	6,572	W	W	9,584	6,599
New Hampshire	52,961	43,536	1,467	2,261	-	-	9,612	7,703
Rhode Island	13,120	14,199	1,649	2,100	W	-	3,489	2,530
Vermont	31,134	30,595	920	1,268	-	-	3,973	1,125
Central Atlantic								
Delaware	21,163	30,156	4,012	455	W	W	W	1,923
Maryland/D.C.	38,907	50,275	3,196	5,738	-	-	11,047	8,991
New Jersey	52,537	46,726	9,184	10,454	128,240	160,381	26,800	21,013
New York	168,187	164,169	9,698	13,880	W	W	20,752	19,200
Pennsylvania	101,385	116,973	17,237	23,474	W	38,860	141,234	77,511
Lower Atlantic								
Florida	328,894	305,058	39,381	36,855	24,348	25,639	25,371	20,718
Georgia	181,892	201,104	16,920	20,012	W	W	18,922	18,768
North Carolina	162,973	162,860	15,272	17,312	835	404	37,011	29,916
South Carolina	86,003	94,602	6,803	13,209	1,034	825	14,718	9,693
Virginia	78,466	91,851	5,079	9,637	797	W	32,160	27,792
West Virginia	11,693	11,437	1,760	2,071	W	19,879	1,893	1,601
Total	1,442,506	1,465,708	142,211	169,733	209,276	254,264	382,034	273,199
PAD Dist. II								
Illinois	237,488	287,490	52,350	67,170	468,944	319,022	47,344	51,521
Indiana	204,099	191,243	20,262	23,467	W	W	32,587	10,604
Iowa	256,299	244,843	19,558	14,279	W	W	16,937	17,357
Kansas	94,795	120,003	13,988	15,142	451,178	313,779	110,533	43,950
Kentucky	129,346	129,622	11,192	15,633	W	3,161	138,596	169,611
Michigan	395,192	361,807	39,224	46,217	W	W	60,441	55,317
Minnesota	219,280	196,148	17,462	19,538	W	-	37,434	27,246
Missouri	306,412	285,648	21,765	21,893	W	-	20,870	28,483
Nebraska	69,719	80,601	5,255	9,004	W	-	6,934	7,612
North Dakota	48,915	13,799	3,163	1,683	-	-	3,765	3,706
Ohio	270,125	272,891	57,020	60,171	72,782	W	257,524	274,214
Oklahoma	115,870	164,328	14,594	21,217	87,429	114,811	42,428	79,405
South Dakota	65,881	57,481	3,485	3,826	-	-	2,095	850
Tennessee	111,758	98,772	27,870	26,431	W	W	20,442	16,941
Wisconsin	239,955	248,784	19,195	29,202	W	-	24,344	24,421
Total	2,765,134	2,753,460	326,383	374,873	1,097,214	896,350	822,274	811,238
PAD Dist. III								
Alabama	125,768	118,763	14,606	18,374	483	W	12,707	5,449
Arkansas	121,083	118,459	9,167	16,816	W	W	4,166	5,145
Louisiana	55,816	56,225	9,411	12,504	1,746,462	2,027,154	176,542	253,834
Mississippi	89,298	108,810	19,199	26,591	W	-	14,063	49,295
New Mexico	52,720	118,970	9,220	10,863	W	W	3,412	4,279
Texas	348,126	409,005	76,427	69,802	8,023,475	8,493,607	306,213	246,931
Total	792,811	930,232	138,030	154,950	9,778,766	10,522,578	517,103	564,933
PAD Dist. IV								
Colorado	69,593	76,141	5,396	7,550	-	W	11,203	12,255
Idaho	14,791	17,965	5,941	6,609	-	-	6,862	7,868
Montana	32,914	33,118	5,036	5,654	W	-	14,282	10,288
Utah	31,689	34,393	7,145	8,411	W	W	5,961	8,264
Wyoming	39,711	26,845	4,804	5,036	W	W	17,333	31,759
Total	188,698	188,462	28,322	33,260	17,063	36,777	55,641	70,434
PAD Dist. V								
Alaska	W	W	W	W	-	-	W	W
Arizona	57,300	52,795	10,573	10,155	W	W	8,609	7,643
California	256,801	291,821	115,861	135,883	76,816	91,649	268,293	217,284
Hawaii	W	W	W	W	-	-	-	-
Nevada	34,161	35,912	2,763	3,457	-	-	6,298	4,139
Oregon	27,159	28,504	19,362	21,197	-	-	19,515	13,594
Washington	26,719	30,506	35,267	36,545	-	-	25,428	14,963
Total	417,550	455,694	185,558	209,438	77,087	91,651	330,951	259,333
U.S. Total	5,606,699	5,793,556	820,504	942,254	11,179,406	11,801,620	2,108,003	1,979,137

1/ The reported data strongly suggest that this category includes not only ethane, propane, butane and pentanes plus consumed as chemical feedstocks, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use as synthetic natural gas feedstock, and use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other 3/		Total		District & State
1986	1985	1986	1985	1986	1985	1986	1985	
								PAD Dist. I
								New England
W	W	754	833	2,566	1,290	46,933	51,680	...Connecticut
W	W	1,114	20	W	W	42,465	26,533	.....Maine
W	2,905	274	391	4,754	3,349	96,788	74,147	.Massachusetts
688	10,080	75	97	6,469	W	71,272	64,713	.New Hampshire
W	-	31	W	6,055	2,055	24,500	20,888	..Rhode Island
W	W	139	193	W	W	37,026	33,848	.....Vermont
								Central Atlantic
-	W	1,940	7,434	2,124	W	33,084	41,825	.....Delaware
W	W	3,421	5,819	3,013	2,614	60,335	76,263	.Maryland/D.C.
W	W	2,164	2,371	4,913	4,040	224,918	246,190	....New Jersey
W	W	7,616	8,334	1,040	1,955	209,498	209,428	.....New York
W	W	19,624	17,040	2,513	5,436	297,677	279,541	..Pennsylvania
								Lower Atlantic
12,612	12,646	17,942	13,022	4,652	3,694	453,200	417,632	.....Florida
W	1,864	49,903	45,195	5,849	7,238	282,443	295,239	.....Georgia
W	W	89,522	106,822	9,061	5,469	314,921	323,396	North Carolina
355	974	13,831	14,392	1,772	1,029	124,516	134,724	South Carolina
W	4,676	19,154	21,658	5,793	6,260	142,242	162,529	.....Virginia
W	W	705	780	167	W	39,948	35,994	.West Virginia
35,170	39,323	228,209	244,405	62,360	47,938	2,501,766	2,494,570	.....Total
								PAD Dist. II
51,113	W	254,471	281,779	13,479	335,876	1,425,189	1,344,500	.....Illinois
W	11,272	84,682	88,719	2,425	3,930	351,314	329,616	.....Indiana
-	-	292,817	312,378	698	5,311	589,213	594,463	.....Iowa
W	-	32,965	31,222	1,093	444,628	704,563	968,724	.....Kansas
228	350	6,636	9,228	228	W	297,974	328,254	.....Kentucky
52,396	W	50,265	51,964	250,789	263,447	848,358	779,118	.....Michigan
29	W	119,192	111,201	4,455	2,442	397,952	356,627	.....Minnesota
W	W	33,359	27,139	1,380	1,871	384,246	373,749	.....Missouri
-	-	80,767	79,377	577	352	163,387	176,946	.....Nebraska
W	W	28,400	7,562	5,136	W	89,402	26,811	..North Dakota
W	W	69,311	70,826	4,258	542,908	731,557	1,367,828	.....Ohio
W	3,393	32,383	45,606	7,123	12,804	299,829	441,564	.....Oklahoma
W	W	32,068	23,312	637	W	104,189	86,254	..South Dakota
W	-	4,252	6,013	2,013	2,062	167,142	150,694	.....Tennessee
W	2,785	61,017	54,243	2,087	2,714	347,047	362,149	.....Wisconsin
11,394	31,223	1,182,585	1,200,569	296,378	1,619,584	6,901,362	7,687,297	.....Total
								PAD Dist. III
-	W	21,446	28,756	233	3,333	175,243	175,401	.....Alabama
-	-	32,271	35,078	600	952	167,770	176,608	.....Arkansas
W	W	6,251	7,248	76,136	243,187	2,146,670	2,667,880	.....Louisiana
W	-	14,837	19,819	984	5,173	147,321	209,688	...Mississippi
W	-	3,903	5,131	856	949	71,193	141,145	....New Mexico
33,439	2,287	71,495	77,515	272,855	229,170	9,132,030	9,528,317	.....Texas
11,650	70,035	150,203	173,547	351,664	482,764	11,840,227	12,899,039	.....Total
								PAD Dist. IV
-	W	2,451	4,824	835	10,580	89,478	114,515	.....Colorado
-	-	2,474	2,780	650	1,008	30,718	36,230	.....Idaho
-	-	9,883	11,415	W	1,122	63,497	61,597	.....Montana
W	W	1,920	1,979	W	2,110	52,144	60,931	.....Utah
W	W	2,197	1,453	4,478	745	81,488	102,070	.....Wyoming
154	8,394	18,925	22,451	8,522	15,565	317,325	375,343	.....Total
								PAD Dist. V
-	-	W	W	W	W	13,300	15,009	.....Alaska
-	-	3,980	5,165	W	W	82,920	76,096	.....Arizona
60,821	58,553	35,764	46,156	17,051	12,772	831,407	854,118	....California
-	-	W	W	-	-	6,712	6,296	.....Hawaii
-	-	1,480	2,913	1,196	969	45,898	47,390	.....Nevada
-	-	5,171	3,881	689	W	71,896	67,666	.....Oregon
-	-	6,976	6,126	582	W	94,972	88,627	....Washington
60,821	58,553	53,966	64,861	21,172	15,672	1,147,105	1,155,202	.....Total
619,189	207,528	1,633,888	1,705,833	740,096	2,181,523	22,707,785	24,611,451	.....U.S. Total

Table 4. Sales of Propane, by Use, in the United States, by PAD District and State, 1986 and 1985 (Thousands of Gallons)

District & State	Residential & Commercial 1986	Residential & Commercial 1985	Internal Combustion Fuel 1986	Internal Combustion Fuel 1985	Chemical 1/ 1986	Chemical 1/ 1985	Industrial 2/ 1986	Industrial 2/ 1985
PAD Dist. I								
New England								
Connecticut	28,803	32,515	1,995	2,990	W	W	11,640	12,769
Maine	26,126	17,734	2,064	1,445	W	W	10,479	5,347
Massachusetts	58,262	51,918	5,574	6,572	-	W	9,423	6,599
New Hampshire	52,961	43,536	1,467	2,261	-	-	9,612	7,703
Rhode Island	13,120	14,199	1,649	2,100	W	-	3,489	2,530
Vermont	31,134	30,595	920	1,268	-	-	3,973	1,125
Central Atlantic								
Delaware	21,163	30,156	4,012	455	W	W	W	1,923
Maryland/D.C.	38,907	50,275	3,196	5,738	-	-	11,047	8,991
New Jersey	52,537	46,726	9,184	10,454	65,008	W	26,800	16,467
New York	168,187	164,169	9,698	13,880	W	-	20,752	19,200
Pennsylvania	101,385	116,973	17,237	23,474	W	W	45,900	35,412
Lower Atlantic								
Florida	328,669	304,977	39,381	36,855	W	-	25,178	20,654
Georgia	181,892	201,104	16,920	20,012	W	W	18,922	18,768
North Carolina	162,973	162,860	15,272	17,312	W	299	37,011	29,916
South Carolina	85,909	94,570	6,803	13,209	W	W	14,718	9,693
Virginia	78,466	91,851	5,079	9,637	W	W	32,160	27,741
West Virginia	11,693	11,437	1,760	2,071	W	W	1,893	1,601
Total	1,442,187	1,465,595	142,211	169,733	92,676	146,324	286,346	226,439
PAD Dist. II								
Illinois	237,488	287,490	52,350	67,170	53,964	79,989	36,592	26,752
Indiana	204,099	191,243	20,262	23,467	W	-	11,755	10,604
Iowa	256,299	244,843	19,551	14,279	-	-	16,937	17,357
Kansas	94,795	120,003	13,969	15,142	6,070	W	31,727	23,046
Kentucky	129,346	129,622	11,192	15,633	W	W	92,915	111,293
Michigan	395,192	361,807	39,224	46,217	-	-	60,174	54,980
Minnesota	219,280	196,148	17,462	19,538	-	-	37,434	27,246
Missouri	306,412	285,648	21,765	21,893	-	-	20,847	28,483
Nebraska	69,719	80,601	5,255	9,004	-	-	6,934	7,612
North Dakota	48,915	13,799	3,163	1,683	-	-	3,765	3,706
Ohio	270,125	272,891	57,020	60,171	W	W	46,839	49,932
Oklahoma	115,870	162,353	14,594	21,217	W	W	42,428	69,985
South Dakota	65,881	57,481	3,485	3,826	-	-	2,095	850
Tennessee	111,758	98,772	27,870	26,431	W	W	20,442	16,941
Wisconsin	239,955	248,784	19,195	29,202	W	-	24,344	24,421
Total	2,765,134	2,751,485	326,357	374,873	143,190	237,865	455,228	473,208
PAD Dist. III								
Alabama	125,628	118,619	14,606	18,374	W	W	12,656	5,449
Arkansas	121,083	118,459	9,167	16,816	-	-	4,166	5,145
Louisiana	55,816	56,225	9,411	12,504	347,989	333,502	16,256	26,709
Mississippi	88,946	108,392	19,199	26,591	W	-	13,960	41,048
New Mexico	52,720	118,970	9,220	10,863	W	-	3,412	4,279
Texas	347,749	357,524	76,427	69,802	2,435,175	2,693,620	101,096	56,719
Total	791,942	878,189	138,030	154,950	2,790,657	3,027,346	151,548	139,349
PAD Dist. IV								
Colorado	69,593	75,799	5,396	7,550	-	W	11,202	12,255
Idaho	14,791	17,965	5,941	6,609	-	-	6,862	7,868
Montana	32,914	33,118	5,036	5,654	-	-	14,282	10,288
Utah	22,174	32,705	6,656	8,411	-	W	5,749	8,091
Wyoming	31,268	23,514	4,417	5,036	-	W	17,031	28,819
Total	170,740	183,101	27,446	33,260	-	2,060	55,126	67,321
PAD Dist. V								
Alaska	W	W	W	W	-	-	W	W
Arizona	57,283	52,795	10,573	10,155	-	W	9,160	7,643
California	255,361	273,160	115,853	135,883	W	W	150,816	132,727
Hawaii	W	W	W	W	-	-	-	-
Nevada	34,161	35,912	2,793	3,457	-	-	6,294	4,135
Oregon	27,159	28,504	19,362	21,189	-	-	19,279	13,281
Washington	26,719	30,506	35,203	36,545	-	-	15,656	11,276
Total	416,093	437,033	185,486	209,430	74,987	48,304	203,013	170,772
U.S. Total	5,586,096	5,715,403	819,530	942,246	3,101,510	3,461,899	1,151,259	1,077,089

1/ The reported data strongly suggest that this category includes not only propane consumed as a chemical feedstock, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility		Farm		Other		Total		
1986	1985	1986	1985	1986	1985	1986	1985	District & State
								PAD Dist. I
								New England
W	W	754	833	319	350	44,136	50,740	...Connecticut
W	W	1,114	20	W	W	42,465	26,533	.....Maine
W	2,905	274	391	839	737	90,850	69,140	.Massachusetts
688	10,080	75	97	6,469	W	71,272	64,713	.New Hampshire
W	-	31	W	345	2,055	18,790	20,888	..Rhode Island
W	W	139	193	W	W	37,026	33,848	.....Vermont
								Central Atlantic
-	W	1,940	7,434	2,124	W	33,084	41,825	.....Delaware
-	W	3,421	5,819	2,217	1,521	58,788	75,170	.Maryland/D.C.
W	W	2,164	2,371	666	1,916	157,439	169,237	....New Jersey
W	W	7,616	8,334	1,040	1,844	208,271	207,715	.....New York
-	W	19,624	17,040	1,948	1,148	186,199	227,758	..Pennsylvania
								Lower Atlantic
12,612	12,646	17,942	13,022	4,652	3,694	429,713	391,848	.....Florida
W	1,864	49,903	45,195	3,886	2,892	272,221	290,040	.....Georgia
W	W	89,522	106,822	4,308	3,481	309,587	321,303	North Carolina
355	974	13,831	14,392	787	828	122,678	133,987	South Carolina
W	4,676	19,154	21,658	5,762	6,247	141,783	162,143	.....Virginia
W	W	705	780	167	W	38,196	35,153	.West Virginia
33,721	39,323	228,209	244,405	37,148	30,222	2,262,498	2,322,041	.....Total
								PAD Dist. II
W	W	254,471	281,779	2,445	2,165	721,452	746,987	.....Illinois
W	11,272	84,682	88,719	1,642	3,068	329,128	328,373	.....Indiana
-	-	292,817	312,378	401	254	586,005	589,111	.....Iowa
W	-	32,965	31,222	943	337,833	180,480	528,816	.....Kansas
228	350	6,636	9,228	228	W	251,123	268,319	.....Kentucky
52,396	W	50,265	51,964	98,001	88,300	695,252	603,272	.....Michigan
29	W	119,192	111,201	2,317	637	395,714	354,822	.....Minnesota
W	W	33,359	27,139	1,008	560	383,653	372,438	.....Missouri
-	-	80,767	79,377	550	131	163,225	176,725	.....Nebraska
W	W	28,400	7,562	5,136	W	89,402	26,811	..North Dakota
W	W	69,311	70,826	3,116	1,683	518,888	601,174	.....Ohio
W	3,393	32,383	45,606	277	1,349	205,670	314,676	.....Oklahoma
W	W	32,068	23,312	637	-	104,189	85,678	..South Dakota
W	-	4,252	6,013	550	428	165,330	149,060	.....Tennessee
W	2,785	61,017	54,243	1,998	1,801	346,655	361,236	.....Wisconsin
144,423	31,223	1,182,585	1,200,569	119,249	438,275	5,136,166	5,507,498	.....Total
								PAD Dist. III
-	W	21,446	28,756	233	2,633	174,913	174,075	.....Alabama
-	-	32,258	35,066	538	718	167,212	176,204	.....Arkansas
W	W	6,251	7,248	7,380	803	519,155	504,719	.....Louisiana
W	-	14,837	19,819	974	3,984	146,667	199,834	...Mississippi
W	-	3,903	5,131	856	403	70,668	139,646	....New Mexico
33,439	2,287	71,294	77,338	12,922	20,224	3,078,102	3,277,514	.....Texas
111,650	70,035	149,989	173,358	22,903	28,765	4,156,717	4,471,992	.....Total
								PAD Dist. IV
-	W	2,451	4,824	835	3,028	89,477	103,723	.....Colorado
-	-	2,474	2,780	650	1,008	30,718	36,230	.....Idaho
-	-	9,883	11,415	W	1,122	63,384	61,597	.....Montana
W	W	1,920	1,979	W	1,732	37,892	57,144	.....Utah
W	W	2,197	1,453	614	622	55,578	65,340	.....Wyoming
154	8,329	18,925	22,451	4,658	7,512	277,049	324,034	.....Total
								PAD Dist. V
-	-	W	W	W	W	13,300	14,889	.....Alaska
-	-	3,980	5,165	W	W	82,183	76,034	.....Arizona
4,817	6,255	35,429	45,854	16,690	9,428	653,953	651,609	....California
-	-	W	W	-	-	6,712	6,296	.....Hawaii
-	-	1,480	2,913	1,196	969	45,894	47,386	.....Nevada
-	-	5,171	3,881	689	W	71,660	67,345	.....Oregon
-	-	6,976	6,126	582	W	85,136	84,940	....Washington
4,817	6,255	53,631	64,559	20,811	12,146	958,838	948,499	.....Total
294,765	155,165	1,633,339	1,705,342	204,769	516,920	12,791,268	13,574,064	.....U.S. Total

Table 5. Sales of Butane, by Use, in the United States, by PAD District and State, 1986 and 1985 (Thousands of Gallons)

District & State	Residential & Commercial 1986	Residential & Commercial 1985	Internal Combustion Fuel 1986	Internal Combustion Fuel 1985	Chemical 1/ 1986	Chemical 1/ 1985	Industrial 2/ 1986	Industrial 2/ 1985
PAD Dist. I								
New England								
Connecticut	-	-	-	-	-	-	-	-
Maine	-	-	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-
Central Atlantic								
Delaware	-	-	-	-	-	-	-	-
Maryland/D.C.	-	-	-	-	-	-	-	-
New Jersey	-	-	-	-	W	W	-	W
New York	-	-	-	-	W	-	-	-
Pennsylvania	-	-	-	-	-	-	-	-
Lower Atlantic								
Florida	W	W	-	-	W	W	-	-
Georgia	-	-	-	-	-	-	-	-
North Carolina	-	-	-	-	W	W	-	-
South Carolina	W	W	-	-	W	-	-	-
Virginia	-	-	-	-	W	W	-	W
West Virginia	-	-	-	-	W	W	-	-
Total	319	113	-	-	48,367	64,904	-	4,597
PAD Dist. II								
Illinois	-	-	-	-	21,066	W	10,752	14,594
Indiana	-	-	-	-	W	-	-	-
Iowa	-	-	W	-	W	-	-	-
Kansas	-	-	W	-	25,896	W	W	W
Kentucky	-	-	-	-	-	-	W	W
Michigan	-	-	-	-	-	-	-	-
Minnesota	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	W	-
Nebraska	-	-	-	-	W	-	-	-
North Dakota	-	-	-	-	-	-	-	-
Ohio	-	-	-	-	-	-	-	-
Oklahoma	-	W	-	-	74,939	W	W	W
South Dakota	-	-	-	-	-	-	-	W
Tennessee	-	-	-	-	-	-	-	-
Wisconsin	-	-	-	-	W	-	-	-
Total	-	1,975	26	-	124,338	106,899	36,388	54,030
PAD Dist. III								
Alabama	140	144	-	-	W	-	-	-
Arkansas	-	-	-	-	W	W	-	-
Louisiana	-	-	-	-	364,936	273,523	5,295	W
Mississippi	352	418	-	-	-	-	W	W
New Mexico	-	-	-	-	W	W	-	-
Texas	377	51,481	-	-	622,443	370,895	27,798	39,195
Total	869	52,043	-	-	987,996	645,019	33,196	72,923
PAD Dist. IV								
Colorado	-	W	-	-	-	W	W	-
Idaho	-	-	-	-	-	-	-	-
Montana	-	-	-	-	-	-	-	-
Utah	W	W	W	-	W	W	W	W
Wyoming	W	W	W	-	W	W	W	W
Total	17,958	5,381	876	-	3,942	7,228	255	2,189
PAD Dist. V								
Alaska	-	-	-	-	-	-	-	-
Arizona	W	-	-	-	-	-	W	-
California	1,440	18,661	W	-	W	W	109,093	84,557
Hawaii	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	W	W
Oregon	-	-	-	W	-	-	W	W
Washington	-	-	W	-	-	-	W	W
Total	1,457	18,661	72	8	1,159	21,113	119,554	88,561
U.S. Total	20,603	78,153	974	8	1,165,802	845,163	189,393	222,300

1/ The reported data strongly suggest that this category includes not only butane consumed as a chemical feedstock, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use and synthetic rubber manufacture.
3/ Includes use in secondary recovery of petroleum.

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

Gas Utility 1986	Gas Utility 1985	Farm 1986	Farm 1985	Other 3/ 1986	Other 3/ 1985	Total 1986	Total 1985	District & State
								PAD Dist. I
								New England
-	-	-	-	W	W	2,247	940	...Connecticut
-	-	-	-	-	-	-	-	.....Maine
-	-	-	-	W	W	3,865	2,612	.Massachusetts
-	-	-	-	-	-	-	-	.New Hampshire
-	-	-	-	W	-	5,710	-	..Rhode Island
-	-	-	-	-	-	-	-	.....Vermont
								Central Atlantic
-	-	-	-	-	-	-	-	.....Delaware
-	-	-	-	W	W	796	331	.Maryland/D.C.
-	-	-	-	W	W	50,472	62,867	....New Jersey
-	-	-	-	-	W	4	93	.....New York
-	-	-	-	W	W	565	386	..Pennsylvania
								Lower Atlantic
-	-	-	-	-	-	1,895	7,588	.....Florida
-	-	-	-	W	W	1,963	1,295	.....Georgia
-	-	-	-	W	W	4,808	2,093	North Carolina
-	-	-	-	-	W	289	58	South Carolina
-	-	-	-	W	W	120	386	.....Virginia
-	-	-	-	-	-	4	510	.West Virginia
-	-	-	-	24,052	9,545	72,738	79,159	.....Total
								PAD Dist. II
-	-	-	-	W	W	42,736	41,706	.....Illinois
-	-	-	-	W	W	785	432	.....Indiana
-	-	-	-	W	W	2,181	1,969	.....Iowa
-	-	-	-	W	W	31,764	83,165	.....Kansas
-	-	-	-	-	-	19,431	16,111	.....Kentucky
-	-	-	-	W	W	105,940	117,089	.....Michigan
-	-	-	-	W	W	2,138	1,508	.....Minnesota
-	-	-	-	W	W	395	399	.....Missouri
-	-	-	-	W	W	59	38	.....Nebraska
-	-	-	-	-	-	-	-	..North Dakota
-	-	-	-	W	W	1,509	1,940	.....Ohio
-	-	-	-	-	W	74,939	85,456	.....Oklahoma
-	-	-	-	-	W	-	576	..South Dakota
-	-	-	-	W	W	1,463	919	.....Tennessee
-	-	-	-	W	W	328	453	.....Wisconsin
-	-	-	-	122,916	188,857	283,668	351,761	.....Total
								PAD Dist. III
-	-	-	-	-	-	159	144	.....Alabama
-	-	W	W	W	W	291	177	.....Arkansas
-	-	-	-	W	W	377,384	447,715	.....Louisiana
-	-	-	-	W	W	465	8,680	...Mississippi
-	-	-	-	-	-	382	456	....New Mexico
-	-	201	177	W	10,412	652,847	472,160	.....Texas
-	-	214	189	9,253	159,158	1,031,528	929,332	.....Total
								PAD Dist. IV
-	-	-	-	-	W	1	1,533	.....Colorado
-	-	-	-	-	-	-	-	.....Idaho
-	-	-	-	-	-	-	-	.....Montana
-	-	-	-	-	W	11,101	3,787	.....Utah
-	W	-	-	W	W	12,250	10,901	.....Wyoming
-	65	-	-	321	1,378	23,352	16,221	.....Total
								PAD Dist. V
-	-	-	-	-	-	-	-	.....Alaska
-	-	-	-	-	-	466	-	.....Arizona
-	W	335	302	W	-	112,371	125,273	....California
-	-	-	-	-	-	-	-	.....Hawaii
-	-	-	-	-	-	4	4	.....Nevada
-	-	-	-	-	-	236	321	.....Oregon
-	-	-	-	-	-	9,836	3,687	....Washington
-	640	335	302	336	-	122,913	129,285	.....Total
-	705	549	491	156,878	358,938	1,534,199	1,505,758	.....U.S. Total

Table 6. Sales of Ethane, by Use, in the United States, by PAD District, 1986 and 1985 (Thousands of Gallons)

District	Residential & Commercial 1986	Residential & Commercial 1985	Internal Combustion Fuel 1986	Internal Combustion Fuel 1985	Chemical 1/ 1986	Chemical 1/ 1985	Industrial 2/ 1986	Industrial 2/ 1985
PAD Dist. I	-	-	-	-	20,463	18,317	95,688	42,163
PAD Dist. II	-	-	-	-	726,832	493,936	330,658	284,000
PAD Dist. III	-	-	-	-	5,465,754	6,426,129	332,361	352,661
PAD Dist. IV	-	-	-	-	17	486	260	924
PAD Dist. V	-	-	-	-	-	-	8,384	-
U. S. Total.....	-	-	-	-	6,213,066	6,938,868	767,351	679,748

Table 7. Sales of Pentanes Plus, by Use, in the United States, by PAD District, 1986 and 1985 (Thousands of Gallons)

District	Residential & Commercial 1986	Residential & Commercial 1985	Internal Combustion Fuel 1986	Internal Combustion Fuel 1985	Chemical 1/ 1986	Chemical 1/ 1985	Industrial 2/ 1986	Industrial 2/ 1985
PAD Dist. I	-	-	-	-	47,770	24,719	-	-
PAD Dist. II	-	-	-	-	102,854	57,650	-	-
PAD Dist. III	-	-	-	-	534,359	424,084	-	-
PAD Dist. IV	-	-	-	-	13,104	27,003	-	-
PAD Dist. V	-	-	-	-	941	22,234	-	-
U. S. Total.....	-	-	-	-	699,028	555,690	-	-

1/ The reported data strongly suggest that this category includes not only ethane and pentanes plus consumed as chemical feedstock, but some refinery olefins and chemical plant fuel usage.
2/ Includes sales for refinery fuel use.
3/ Includes use as synthetic natural gas feedstock, and use in secondary recovery of petroleum.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases", Annual Survey.

Gas Utility		Farm		Other 3/		Total		
1986	1985	1986	1985	1986	1985	1986	1985	District
1,449	-	-	-	-	-	117,600	60,480	PAD Dist. I
266,971	-	-	-	2,003	923,694	1,326,464	1,701,630	PAD Dist. II
-	-	-	-	319,459	238,523	6,117,574	7,017,313	PAD Dist. III
-	-	-	-	855	277	1,132	1,687	PAD Dist. IV
56,004	51,658	-	-	-	-	64,388	51,658	PAD Dist. V
324,424	51,658	-	-	322,317	1,162,494	7,627,158	8,832,768	U. S. Total

Gas Utility		Farm		Other		Total		
1986	1985	1986	1985	1986	1985	1986	1985	District
-	-	-	-	1,160	8,171	48,930	32,890	PAD Dist. I
-	-	-	-	52,210	68,758	155,064	126,408	PAD Dist. II
-	-	-	-	49	56,318	534,408	480,402	PAD Dist. III
-	-	-	-	2,688	6,398	15,792	33,401	PAD Dist. IV
-	-	-	-	25	3,526	966	25,760	PAD Dist. V
-	-	-	-	56,132	143,171	755,160	698,861	U. S. Total

Table 8. Sales of Natural Gas Liquids and Liquefied Refinery Gases for Gasoline Blending by Product Type, PAD District and State, 1986 and 1985 (Thousands of Gallons)

District & State	Butane		Pentanes Plus		Total	
	1986	1985	1986	1985	1986	1985
PAD Dist. I						
New England						
Connecticut	-	-	-	-	-	-
Maine	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-
New Hampshire	-	-	-	-	-	-
Rhode Island	-	-	-	-	-	-
Vermont	-	-	-	-	-	-
Central Atlantic						
Delaware	W	W	-	W	17,872	18,142
Maryland/D.C.	-	-	-	-	-	-
New Jersey	131,781	45,296	-	W	131,781	124,553
New York	-	-	-	-	-	-
Pennsylvania	312,107	172,280	-	W	312,107	175,827
Lower Atlantic						
Florida	W	W	W	156,015	187,005	178,526
Georgia	-	-	-	W	-	17,065
North Carolina	-	-	-	-	-	-
South Carolina	-	W	-	-	-	692
Virginia	-	-	-	-	-	-
West Virginia	-	-	-	-	-	-
Total	464,175	246,047	184,590	268,758	648,765	514,805
PAD Dist. II						
Illinois	636,318	665,073	139,595	15,302	775,913	680,375
Indiana	96,605	36,665	W	W	219,929	128,296
Iowa	-	-	-	-	-	-
Kansas	451,874	500,945	495,878	558,763	947,752	1,059,708
Kentucky	98,855	81,792	W	W	121,621	101,927
Michigan	63,230	44,695	W	W	63,306	47,659
Minnesota	W	W	-	W	19,225	104,895
Missouri	W	7,608	-	-	365	7,608
Nebraska	W	-	W	W	911	811
North Dakota	56,741	47,922	11,866	59,360	68,607	107,282
Ohio	W	W	-	-	60,065	103,796
Oklahoma	142,865	164,165	59,877	92,221	202,742	256,386
South Dakota	-	-	-	-	-	-
Tennessee	-	-	-	W	-	4
Wisconsin	-	W	-	-	-	155
Total	1,626,618	1,680,391	853,818	918,511	2,480,436	2,598,902
PAD Dist. III						
Alabama	W	W	W	W	1,298	1,455
Arkansas	W	W	W	W	5,297	2,920
Louisiana	1,372,750	1,080,800	349,579	380,035	1,722,329	1,460,835
Mississippi	W	12,648	-	W	24,568	12,706
New Mexico	22,343	26,280	51,396	187,814	73,739	214,094
Texas	1,819,329	1,550,281	1,687,138	2,010,124	3,506,467	3,560,405
Total	3,244,576	2,672,598	2,089,122	2,579,817	5,333,698	5,252,415
PAD Dist. IV						
Colorado	8,301	9,757	24,380	30,448	32,681	40,205
Idaho	-	-	-	-	-	-
Montana	W	W	W	57,280	18,025	141,311
Utah	67,148	52,016	209,671	99,882	276,819	151,898
Wyoming	95,723	82,726	98,838	162,741	194,561	245,467
Total	173,292	228,530	346,794	350,351	520,086	578,881
PAD Dist. V						
Alaska	-	-	-	-	-	-
Arizona	W	W	W	W	9,350	16,536
California	243,956	247,469	260,516	203,297	504,472	450,766
Hawaii	-	-	-	-	-	-
Nevada	W	W	-	-	132	42
Oregon	-	-	W	-	73	-
Washington	102,569	169,788	-	-	102,569	169,788
Total	355,902	432,960	260,694	204,172	616,596	637,132
U.S. Total.../....	5,864,563	5,260,526	3,735,018	4,321,609	9,599,581	9,582,135

W Data withheld to avoid disclosure of individual company data.

Source: API, "Sales of Natural Gas Liquids and Liquefied Refinery Gases," Annual Survey.

ETHANE—A normally gaseous paraffinic compound (C2H6). Include ethane sold in an ethane-propane mix. Note: Report ethane-ethylene mixtures for chemical use under Section A5. Subheading a. "Raw Materials and Solvents for Chemical Plants."

PROPANE—Include all products covered by the Gas Processors Association (GPA) specifications for commercial and HD-5 propane including propane sold in ethane-propane and butane-propane mixes. Also include propylene in this category.

BUTANE—Include all products covered by GPA specifications for commercial butane including butane sold in a butane-propane mix. Also include isobutane and butylene in this category.

PENTANES-PLUS—A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Include isopentane, natural gasoline and plant condensate. Exclude field condensate which is mixed with crude oil and reported as part of crude oil and field condensate production to DOE.

LIQUEFIED REFINERY GASES (LRG)

Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reporting categories are ethane/ethylene, propane/propylene, normal butane/butylene. Excludes still gas used for chemical or rubber manufacture which is reported as a petrochemical feedstock and also excludes liquefied petroleum gases intended for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstock or other uses.

STILL GAS (REFINERY GAS)

Any form of mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is reported to DOE for petrochemical feedstock use and/or refinery fuel use, but they should not be reported on this survey form if used in the gaseous state.

RESIDENTIAL AND COMMERCIAL USES—Include liquefied petroleum gases sold for use in private households and commercial establishments such as motels, restaurants, retail stores, laundries, etc., primarily for use in space heating, water heating and cooking. *LP gases used for space heating and cooking in farm houses should be reported under FARM USES.*

INTERNAL-COMBUSTION ENGINE FUEL—Include liquefied gases for use in highway vehicles, forklifts, oil-field drilling and production equipment, etc. *LP gases used for tractors and irrigation engines and other agricultural vehicles should be reported under FARM USES.*

INDUSTRIAL USES—Include liquefied petroleum gases sold to manufacturing plants for such uses as standby fuel, space heating, flame cutting, metallurgical furnaces etc. Include sales to petroleum refineries for fuel use. For internal use, include NGLs and LRGs consumed by your company as fuel. *Sales or internal use of NGLs and LRGs for gasoline blending should not be reported in this category. Such sales or internal use should be reported in Section B2.*

GAS DISTRIBUTION COMPANIES—Include sales of ethane and liquefied petroleum gases sold to gas utility companies for use as a standby fuel or direct distribution in gas mains.

RAW MATERIALS AND SOLVENTS FOR CHEMICAL PLANTS—Include natural gas liquids or liquified refinery gases sold or used internally as raw materials and solvents in the manufacture of chemicals. Also include volumes used in the production of synthetic rubber. *Sales to chemical plants for use as plant fuel should be reported in the "industrial use" category.*

FARM USES—Include liquefied petroleum gases sold for use in tractors, irrigation engines, *space heating of buildings (including farm houses)*, cooking, crop drying, tobacco curing, flame cultivation, poultry breeding, and other agricultural applications.

ALL OTHER USES--Include natural gas liquids, and liquefied refinery gas sold or used for any purpose not covered in the above categories, including secondary recovery use. Include NGLs and LRGs for use as SNG feedstock. Sales to SNG plants for use as plant fuel should be reported in the "industrial use" category.